05 04 14 15	CMP	... so you can see, the same data that Dr. Berry got on me in Gemini VII is also good for Frank on Apollo 8.
05 04 14 33	CC	Roger. He heard that.
05 04 19 25	CMP	Houston, Apollo 8. - -
05 04 19 28	CC	Apollo 8, Houston.
05 04 19 31	CMP	Do you see that PROGRAM ALARM we got when we went through P37, 1302?
05 04 19 35	CC	Affirmative.
05 04 19 39	CMP	I'll run through it again and see what happens here.
05 04 19 41	CC	Roger. We're monitoring.
05 04 21 23	CC	Apollo 8, Houston.
05 04 21 36	CMP	Go ahead.
05 04 21 37	CC	Looks like you loaded the wrong time in P37. You should load 144:46 for your midcourse time; looks like you loaded 146:46.
05 04 21 46	CMP	Okay. I'm sorry. Yes, I have it here. I wrote it down, 146:46. Okay.
05 04 21 55	CC	Roger.
05 04 21 57	CMP	I guess the best way to terminate this is by going back to POO, is that right?
05 04 22 00	CC	Affirmative.
05 04 28 02	CMP	Houston, Apollo 8. It looks like a plus 2.8 foot per second correction at midcourse 7.
05 04 28 11	CC	Roger, Jim.

05 04 41 25	CDR	Houston, Apollo 8.
05 04 41 30	CC	Apollo 8, Houston. Go.
05 04 41 33	CDR	Started the fuel cell purge, and I'm going to 183:15, and I'll start that three-tenths of a degree per second roll stabilization test for you.
05 04 41 42	CC	Roger, Frank. Thanks.
05 04 41 55	CDR	Okay. There we are, and we are going to start rolling now.
05 04 41 57	CC	Roger.
05 04 42 16	CC	Frank, on this free pitch and yaw, if either one of them gets outside of 15 degrees from the nominal values, we'll call it off.
05 04 42 32	CDR	Okay.
05 04 45 00	CC	Apollo 8, Houston. I would like to have the BIOMED switch left now, if you can.
05 04 45 09	CDR	Roger, it's LEFT.
05 04 47 39	CMP	The fuel cell purged to complete, O_2.
05 04 47 47	CC	Say again, Apollo 8.
05 04 47 51	CMP	O_2 fuel cell purge complete.
05 04 47 53	CC	Roger, thanks.
05 04 50 50	CC	Apollo 8, Houston.
05 04 50 55	CDR	Go ahead, Houston. Apollo 8.
05 04 50 58	CC	Looks like you've exceeded your 15 degrees offset PTC attitude, so you can go to attitude HOLD in pitch and yaw.

05 04 51 05	CDR	Okay. I'll go back to the attitude. We didn't even get around once, did we?
05 04 51 09	CC	Doesn't look like it. So much for spin stabilization.
05 04 51 15	CDR	Well, we tried that last night several times 0.5 to 0.2 degree per second.
05 04 51 51	CDR	I think there is the phenomena known as inertial coupling that has something to do with that, huh?
05 04 51 57	CC	Roger. That could be.
05 04 52 01	LMP	Put a bigger rudder on it.
05 04 52 05	CC	Need some feathers, Frank.
05 04 52 08	CDR	(Laughter)
05 04 52 35	CC	Apollo 8, Houston. On the P37 comparison; using the MSFN vectors, we get a minus 1.4 on that midcourse, compared to your 2.8. We ran your solutions through our computer and we also get a 2.8, so your P37 looks good. We are busy still fiddling with the vectors and comparing them and we'll keep an eye on the difference.
05 04 53 03	CMP	Roger. It looks like we came up with a plus 2.8 though, and you say you came out with a minus 2. something.
05 04 53 10	CC	Affirmative.
05 04 53 28	CC	Jim, that 4 feet per second difference is worth 0.28 degrees on the flight path angle.
05 04 53 35	CMP	Roger. Thank you.
05 05 07 10	CC	Apollo 8, Houston.

05 05 07 13	CDR	Go ahead, Houston.
05 05 07 15	CC	Roger, Frank. How is your cabin temperature looking now?
05 05 07 20	CDR	It's getting cooler, thank you. We put those shades up, and that really helps.
05 05 07 22	CC	Okay. The primary loop down here still looks real good, so it looks like you are in fine shape. Your battery B charge ought to be done by about 127 hours, and we think you shouldn't even try to charge battery A, since it looks like, at entry interface, it is going to have 38 amp-hours on it.
05 05 07 45	CDR	I'll tell Bill that.
05 05 07 47	CC	Okay.
05 05 08 48	CDR	How is the weather down there, Jerry?
05 05 08 52	CC	That's loud and clear.
05 05 08 55	CDR	Cold?
05 05 08 57	CC	No, it's pretty balmy around here today.
05 05 09 13	CC	Yes, the temperature is about in the 70's here. It's a real nice day.
05 05 09 22	CDR	Fine.
05 05 09 54	CDR	Say, Jerry, last night, Jim was saying something about turning on VHF Simplex A about 20 000 miles out. I wrote it down, but I can't seem - I can't remember where I put it. ...
05 05 10 11	CC	Roger, Frank. We've got it in the checklist here as right around 4 minutes - 4 hours before EI,

right after your nominal P23, P37 onboard comparisons, KG-1, page E-1.

05 05 30 00	CC	Apollo 8, Houston.
05 05 30 04	CDR	Go ahead.
05 05 30 07	CC	Roger. We're showing some garbage on your computer. If you will hit ERROR RESET, we can clear that PROGRAM ALARM so the next one can be identified. Over.
05 05 30 15	CDR	We don't have any PROGRAM ALARM.
05 05 30 18	CC	I think this - this is a carryover from your last PROGRAM ALARM there on that P37.
05 05 30 23	CDR	Okay. ERROR RESET. Thank you.

END OF TAPE

05 05 30 38	CDR	That do it?
05 05 30 41	CC	Stand by. Okay. Thank you, Frank. That did it.
05 05 30 49	CDR	Roger.
05 06 38 28	CC	Apollo 8, Houston.
05 06 38 31	CDR	Go ahead, Houston. Apollo 8.
05 06 38 33	CC	Roger. Your battery is full; you can terminate charging. You've got 40 amp-hours on it now, and we've got a couple of requests for data here.
05 06 38 41	CDR	Roger.
05 06 38 42	CC	- - requests.
05 06 38 45	CDR	Okay. We were just talking about that. I tell Bill stop. Okay. What are your requests?
05 06 38 52	CC	The first one is - the first time somebody is down in the equipment bay, we would like to get another reading on your RCS temperatures - those six temp meter readings - -
05 06 39 00	CDR	Okay.
05 06 39 02	CC	- - and the other one is of the boys in the back - -
05 06 39 04	CDR	We just read them again.
05 06 39 05	CC	Beg your pardon?
05 06 39 06	CDR	We just read the RCS thruster temperatures again, and they are all pegged high.
05 06 39 14	CC	Okay. Good deal, Frank. The other one is - the boys in the back room would like some time when

everybody is awake - if you would fire up both cabin fans for about 5 minutes, they would like to see what the DELTA temperature is on the telemetry when you get the stagnation broken down and get some flow going over it. So if you can see your way clear to do that, we would like to see it some time when everybody is up.

05 06 39 43	CMP	We had that running before in the flight. Did they check it then?
05 06 39 49	CC	You mean early in the game, when you were cool?
05 06 39 52	CDR	Yes. When we were cool. Right.
05 06 39 55	CC	Yes. They got that data, and they were kind of interested in seeing what it looks like when the cabin is nice and warm and the temperature indicator is reading on the high side, to see how the DELTA works in the other direction.
05 06 40 07	CDR	Okay. Coming on.
05 06 40 08	CC	Okay. Thank you.
05 06 40 22	CDR	What else, Jerry?
05 06 40 25	CC	That's it, Frank.
05 06 40 30	CC	Another thing, Frank, is we just want to remind you that there is no charge needed on A battery.
05 06 40 36	CDR	Hey, listen, these cabin fans - one of them sounds like it's got a bad bearing. We are going to turn it off. It's got a real squeal to it.
05 06 40 42	CC	Okay, Frank.

05 06 40 45	CDR	Sounds like it's got something in it.
05 06 40 50	CC	That must be Bill's teddy bear.
05 06 40 54	CDR	Say again.
05 06 40 55	CC	That must be Bill's teddy bear.
05 06 40 59	CDR	I don't know, but there is something in there.
05 06 41 46	CDR	We will try them again, one at a time, and see if we can determine which one's got the noise.
05 06 41 50	CC	Roger.
05 06 42 15	CDR	Number 2 is really bad. It's got a bad bearing, and it whines like mad, so we are not going to turn it on.
05 06 42 22	CC	Roger. Thank you.
05 06 42 26	CDR	We are not going to try number 1 either; there may have - something might have got in both of them, Jerry.
05 06 42 31	CC	Okay, Frank. That's fine.
05 06 42 46	CDR	Sounds like that MG starter of yours.
05 06 42 55	CC	I'm afraid to turn my starter on now. It's been so long.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

(GOSS NET 1)

05 07 14 36	CDR	Houston, Apollo 8.
05 07 14 39	CC	Apollo 8, Houston. Go.
05 07 14 42	CDR	Roger. We would leave the PTC long enough to go orient toward the earth for a TV shot to see if this TV thing is going off on 128.
05 07 15 20	CC	Roger, Frank. That is fine. Do you have the gimbal angles you need?
05 07 15 26	CDR	Yes, thank you. I got them earlier today.
05 07 15 29	CC	Okay.
05 07 15 43	CDR	I'd like to keep this one kind of short because we're trying to get some sleep earlier than yesterday.
05 07 15 52	CC	Say again, Frank. You are getting pretty garbled.
05 07 16 03	CDR	How is that antenna?
05 07 16 05	CC	Loud and clear, Frank.
05 07 16 07	CDR	I said, will this be a short one? We are trying to hurry things up a little bit to see if we can get as much sleep as possible.
05 07 16 15	CC	Roger.
05 07 16 38	CC	Apollo 8, Houston. Would you put the BIOMED switch on the right side now, please?
05 07 16 44	CDR	Roger.
05 07 16 50	CC	Frank, do you intend to start your TV before 128?
05 07 17 02	CDR	Negative; no.

05 07 17 04	CC	Roger.
05 07 17 05	CDR	That is what you wanted, isn't it? I thought that is what it was all squared away for.
05 07 17 10	CC	Affirmative.
05 07 18 22	CC	Apollo 8, Houston. Are you planning on using the wide angle lens?
05 07 18 28	CDR	I think that would be best.
05 07 18 31	CC	Okay. Jack says you want to be sure and use the red filter and the filter holder for that one. It takes a little darker filter.
05 07 18 40	CDR	Okay.
05 07 18 57	CDR	Do you want to take both red filters on there or just the one for the filter holder?
05 07 19 10	CC	He thinks just the red one on the filter holder will do, but might not hurt to have the other one ready, just in case.
05 07 19 38	CDR	How about if we use the telephoto? It will be a little harder to focus, but it might end up a better picture.
05 07 19 52	CC	Roger, Frank. If you want to use the telephoto lens, you ought to use the same combination you used going out, the 25A.
05 07 20 02	CDR	Okay.
05 07 22 12	CDR	Hey, Jerry.
05 07 22 17	CC	Roger, Frank.
05 07 22 19	CDR	Ask your EECOM how many gallons of fuel we burned for TEI, will you?

05 07 22 24	CC	Roger. In work, he's breaking out his sathometer now.
05 07 23 04	CC	Apollo 8, Houston. We will be handing over to Goldstone in 2 minutes. Over.
05 07 23 14	CDR	Roger, Jerry.
05 07 23 58	CC	Frank, the doctors say they are not getting anything on Bill yet. Apparently, he is not plugged up.
05 07 24 07	CDR	He is down underneath the couch getting some stuff out; he doesn't have his umbilical on.
05 07 24 12	CC	Okay.
05 07 24 17	CDR	Tell them to look at the stuff they got yesterday. He hasn't changed at all, just as mean as ever.
05 07 24 30	CC	Roger.
05 07 24 43	CC	Hey, Frank, this simulation has really been great. What do you say after these photos we recycle back to TLI again?
05 07 24 54	CDR	That's fine. Bring on the backup crew.
05 07 24 57	CMP	Hey, Jerry, yesterday I tried to cycle back to the pass and 01 was lunar.
05 07 25 05	CC	Jim, we missed that. Say it again when you get a better antenna.
05 07 25 14	CDR	Don't blame your antenna problems on us ...
05 07 25 29	CC	Apollo 8, Houston. We are not reading you; stand by one.

05 07 26 50	CDR	Houston, do you read now?
05 07 26 51	CC	Roger. Loud and clear.
05 07 26 57	CDR	I say, Bill will be ready in a minute; he is cycling back and forth under the couch trying to get the TV stuff out.
05 07 27 01	CC	Okay.
05 07 27 06	CC	Backup crew says they are ready to go.
05 07 27 12	CDR	Great. A most fantastic voyage.
05 07 27 24	CC	Sure was.
05 07 27 27	CDR	We're not through yet. We've still got 100 000 miles to go. You know, we kind of feel like it was all over with TEI, but we're still a long way.
05 07 27 40	CMP	Jerry, what I was saying before: I tried to hurry up the voyage home by calling up PROGRAM 01 to get us back on the PAD, but it didn't work.
05 07 27 54	CC	Well, that's the best excuse I've heard so far, Jim.
05 07 27 59	CDR	The best of many.
05 07 39 35	CC	Apollo 8, Houston.
05 07 39 39	CDR	Go ahead, Houston. Apollo 8.
05 07 39 41	CC	Roger, Frank. On TEI, you burned 1480 gallons.
05 07 39 47	CDR	Thank you.
05 07 40 31	CC	Frank, are you going to need Jim's slide rule for that calculation?

05 07 40 36	CDR	I got 162.
05 07 41 30	CMP	Houston, Apollo 8.
05 07 41 32	CC	Apollo 8, Houston. Go.
05 07 41 35	CMP	Roger. This is one of those rare occasions where Bill left his seat and I am now sitting in it, and for the first time, I can see the earth. I'm looking through his monocular; it's pretty nice.
05 07 41 54	CC	Roger.
05 07 41 55	CMP	You had a little weather today it appears.
05 07 41 57	CC	Last word from the weather guys here was that it was clear.
05 07 42 06	CMP	Well, we could see South America and Florida and through the lower part of the U.S. Looks like there is a weather front going over into the central part of the United States, lot of clouds over the northwest area. Florida is clear; it looks like the east coast is pretty clear.
05 07 42 24	CC	Roger. Clear but cold.
05 07 42 30	CMP	Lot of clouds up in Canada.
05 07 42 35	CC	Maybe the geese will go home.
05 07 43 30	CDR	Jerry, we are going to turn it on and see how the picture is.
05 07 43 33	CC	Roger.
05 07 43 56	CC	Nothing yet, Frank.
05 07 44 00	CDR	Takes a while to warm up, I think.

05 07 45 03	CDR	Any luck yet, Jerry.
05 07 45 05	CC	Not yet, Frank.
05 07 45 33	CC	We got a picture now, Frank. It's twitching.
05 07 46 00	CC	The earth is on now, Frank.
05 07 46 04	CDR	How's it look?
05 07 46 06	CC	We are seeing about half of it. You moved in the wrong direction. Okay. It's coming back, a little more. Good, now a shade toward the terminator.
05 07 46 30	CC	A little bit more toward the terminator and in the same direction you were moving it before. Right; you have got it centered right in the middle.
05 07 47 01	CC	Now move it away from the terminator just a bit.
05 07 47 11	CC	Good picture.
05 07 47 15	CDR	Okay. You want us to wait until 128, right?
05 07 47 19	CC	Affirmative. Frank, move your camera to the right; I want to see which way the earth moves on my screen.
05 07 47 30	CC	Okay. Moving your camera to the right moves the earth to the left on our screen. On our screen, the terminator is almost parallel to the horizontal direction, and the dark part is on the top.
05 07 47 52	CDR	Okay. We will turn it back on at 128, then.
05 07 47 55	CC	Okay, Frank.

05 07 48 02	CC	Apollo 8, Houston. Are you on a high-gain antenna?
05 07 48 05	CDR	Roger.
05 07 48 07	CDR	Roger.
05 07 48 14	CC	What beam width are you on, Apollo 8?
05 07 48 19	CDR	NARROW.
05 07 48 21	CC	Roger. NARROW.
05 07 49 16	LMP	This is Apollo 8. Do you read?
05 07 49 18	CC	Apollo 8, Houston. Loud and clear.
05 07 49 22	LMP	Roger. Radio check.
05 07 49 24	CC	Roger.
05 07 49 34	LMP	Houston, Apollo 8. How do you read now? Over.
05 07 49 37	CC	Apollo 8, Houston. Loud and clear.
05 07 49 40	LMP	Roger. We're just trying something - -
05 07 52 59	CC	Apollo 8, Houston. You are in the scan limit right now on the high-gain antenna; although you may have NARROW beam width selected, you are in WIDE. To improve the situation would take a pitch down and a yaw left, and we will have FAO check it and give you some angles if we need to change it.
05 07 53 22	CDR	We just got out of the scan limit by pitching up and yawing right.
05 07 53 40	CC	Roger. You are right, Frank.
05 07 53 45	CDR	Are we still in wide band, or are we in narrow band now?
05 07 53 49	CC	We are checking.

05 07 55 05	CC	Apollo 8, Houston. EECOM says you are in good shape now.
05 07 55 09	CDR	Okay.
05 07 56 52	CC	Apollo 8, Houston. COMM check.
05 07 56 55	CDR	Loud and clear.
05 07 56 56	CC	Roger.
05 08 01 13	CC	Apollo 8, Houston. We're getting television.
05 08 01 16	CDR	Roger. How's the picture?
05 08 01 21	CC	Roger. The picture is on the lower right hand of our screen.
05 08 01 30	CC	Camera should go down away from the terminator and to the right.
05 08 01 50	CC	Still down and about the same place; a little worse; now it's coming in.
05 08 01 59	CMP	Are you getting it now, Jerry?
05 08 02 01	CC	Roger. We've got most of it; keep moving off to the right. Good. You have it centered right now.
05 08 02 11	CMP	Well, the earth looks a little bigger to us today, not much, but it's somewhat bigger. I'm sitting over in the right hand seat now; Bill has got the TV camera; Frank is helping him out aiming it directly to hit the earth. I hope we have a good picture. Can you see the clouds?
05 08 02 28	CC	Affirmative. We sure can. Move it up toward the terminator - correction, away from the terminator just a shade.

05 08 02 38	CMP	At the tip of South America, there is a great swirl of clouds down there. It looks like a great storm. I wonder if you can see it.
05 08 02 45	CC	Roger. We see a large swirl just south of the terminator.
05 08 02 52	CMP	Roger. And then up to the left hand side, or towards the north, we can see the light waters around the West Indies, and we can actually see Florida. I'm looking through Bill's monocular, and I can see the various land masses, South America and the central part and southern part of the United States.
04 08 03 11	CC	Roger. Move a little bit away from the terminator now, a little left with the camera and a little further from the terminator.
05 08 03 27	CMP	Say it again, Jerry.
05 08 03 30	CC	Okay. You're moving it toward the center of the screen now, and the earth is off on the left side of our screen.
05 08 03 40	CC	Real fine. That's good. Hold it right there.
05 08 03 56	CMP	What we're thinking about right now, Jerry, is hitting that wedge angle, about 2 degrees their limit. When we come back, the earth looks pretty small right from here.
05 08 04 06	CC	Roger.
05 08 04 10	CMP	You got it, Bill.

05 08 04 22	LMP	As I look down on the earth here from so far out in space, I think I must have the feeling that the travelers in the old sailing ships used to have: going on a very long voyage away from home, and now we're headed back, and I have that feeling of being proud of the trip, but still - still happy to be going back home and back to our home port. And that's - that's what you're seeing right here.
05 08 04 50	CC	Roger, Bill. We'll sure be glad to get you back, too.
05 08 04 59	CDR	This is Frank Borman. We've enjoyed the television shows, and we'd like you to stay tuned in in the future because there'll be flights and rendezvous and earth orbit, and then, of course, there'll be television from the lunar surface itself in the not too far distant future. So, until then, I guess this is the Apollo 8 crew signing off, and we'll see you back on that good earth very soon.
05 08 05 27	CC	Roger, Frank. Adios.
05 08 06 53	CC	Apollo 8, Houston.
05 08 06 57	CMP	Go ahead.
05 08 06 58	CC	We'd like you to go back to PTC. Pick either attitude that's easiest to fly to.
05 08 07 06	CMP	Roger. In work.

05 08 11 26	CC	Apollo 8, Houston.
05 08 11 28	CDR	Go ahead, Houston. Apollo 8.
05 08 11 30	CC	Roger. Your PTC attitude ought to be either a 1045 or a 18315. We'd recommend 18315. That will keep your windows out of the sun.
05 08 11 42	CDR	180, that's right. I got them mixed up, didn't I? It's 18315.
05 08 11 46	CC	Roger.
05 08 17 03	CDR	Okay, Jerry ...
05 08 17 15	CC	Apollo 8, this is Houston. You're unreadable due to background noise. Over.
05 08 17 23	CDR	How now, Jerry?
05 08 17 25	CC	Loud and clear.
05 08 17 27	CDR	I say we're starting to stow the spacecraft and get all squared away and then be sleeping and eating. We'll be all thinking about entry from now on.
05 08 17 34	CC	Roger, Frank. And now that Bill's up, we'd like to get a redundant components check.
05 08 17 40	CDR	Alright. He's putting helmets in the food boxes. Just a minute, I'll get him to do it for you.
05 08 17 45	CC	Roger. There is no great hurry, Frank. We're - -
05 08 17 47	CDR	Roger.
05 08 17 49	CC	We're mostly interested in looking at the secondary loop.

05 08 17 54	CDR	That's what I was going to say. I can't see any reason to check anything other than the secondary loop, can you?
05 08 17 58	CC	That's affirmative.
05 08 18 08	CDR	Now in that cabin cold soak, we won't have any cabin fans.
05 08 18 13	CC	Roger. I understand.
05 08 19 52	CMP	Jerry, this is Apollo 8.
05 08 19 54	CC	Apollo 8, go.
05 08 19 57	CMP	Roger. I just got on the sextant and now looking at Texas, and the weather man is right, it looks like a pretty good day. Full of clouds down there, but not bad.
05 08 20 06	CC	Real fine, Jim. Can you see the kids out in the yard waving?
05 08 20 14	CMP	Would you tell Pete Conrad to get his kids off my roof?
05 08 20 16	CCWilco.	
05 08 20 22	CC	Jim, do you see the bright spot out in the Pacific Ocean through the sextant?
05 08 20 31	CMP	I'll try. We saw it, of course, through the windows and through the monocular. I'll see if I can spot it.
05 08 20 37	CC	Roger.
05 08 21 32	CMP	Yes, Jerry, I can see the bright spot. It's - I guess it's the subsolar point. It's off of South America, it appears to me. It is a grayish

spot compared to the blue waters surrounding it. It's undefined in diameter, though, I mean, it's not a clear round spot at all; it's just a raggedy one.

05 08 21 53	CC	Roger. That showed up real well on the TV's picture.
05 08 22 12	CC	Apollo 8, Houston. We'd like to delay that request for a secondary loop check to a little better point as far as thrusting is concerned.
05 08 22 22	CDR	Fine. We can wait for a long time on that.
05 08 22 27	CC	Okay.
05 08 24 10	CC	Apollo 8, Houston.
05 08 24 13	CMP	Go ahead, Houston.
05 08 24 14	CC	Roger. Jim, we've got some bird watchers in the viewing room.
05 08 24 20	CMP	Bird watchers, huh?
05 08 24 21	CC	Roger.
05 08 24 22	CMP	Sounds good. Who are they?
05 08 24 26	CC	Marilyn.
05 08 24 28	CMP	Oh, well, good. Say hello to her for me.
05 08 24 31	CC	Yes, and she's got a few troops with her, too.
05 08 24 38	CMP	Did she see the TV, I wonder?
05 08 24 41	CC	Affirmative. Barbara and Jay are with her.
05 08 24 45	CMP	Good.

05 08 26 38	CC	Apollo 8, Houston. We're replaying your television pictures now. We can see the Chilean coast and Florida.
05 08 26 45	CDR	Very good.
05 08 26 48	LMP	That's a pretty good little television camera, isn't it?
05 08 26 50	CC	It sure is. With the right filters on it, it's great. That was a Schmitt input.
05 08 27 05	CMP	He must be a Jack of all trades.
05 08 27 10	CC	Beautiful.
05 08 30 01	CDR	Houston, Apollo 8.
05 08 30 03	CC	Apollo 8, Houston. Go.
05 08 30 06	CDR	Bill would like to ask the friendly Flight Surgeon's permission to take a Seconal so he can sleep.
05 08 30 17	CC	Roger. Copy.
05 08 30 31	CC	Apollo 8, Houston. That's a "yes."
05 08 30 36	CDR	Thank you.
05 08 32 37	CC	Apollo 8, Houston.
05 08 32 40	CMP	Go ahead.
05 08 32 42	CC	Roger. Before Bill falls asleep, we'd like to have him go ahead and do that secondary EVAP check now at any time at his convenience, and if we don't happen to be able to monitor it with high bit rate, just let us know when you did it.

05 08 32 57	CMP	Roger. I'll tell him that evaporator check at any time.
05 08 33 02	CC	Roger.
05 08 40 38	CC	Apollo 8, Houston. BIOMED switch to the CDR. Over.
05 08 40 44	CMP	Roger. In work.

END OF TAPE

05 08 48 00	LMP	Houston, Apollo 8. Over.
05 08 48 04	CC	Apollo 8, Houston. Go.
05 08 48 09	LMP	Good afternoon, Jerry.
05 08 48 11	CC	Howdy.
05 08 48 14	LMP	Okay. Somebody said something about checking out the evaporator - evaporators. What do you want to do?
05 08 48 20	CC	Roger. Before we get too far along, we'd like to see, essentially with the secondary evaporator check, what we got on the redundant components check.
05 08 48 31	LMP	Okay. Stand by.
05 08 48 33	CC	Roger. EECOM says to be sure and let it go for at least 5 minutes.
05 08 48 39	LMP	Roger. Now you want to check out the primary evaporator also, or did you decide it's not necessary?
05 08 48 46	CC	I guess they decided it's not necessary, Bill.
05 08 48 52	LMP	Okay.
05 08 49 31	LMP	Okay. Secondary glycol loops coming on the line.
05 08 49 34	CC	Roger, Bill.
05 08 49 59	LMP	And the secondary evap's coming on the line.
05 08 50 02	CC	Roger.
05 08 51 07	LMP	And it's stabilized the leg, oh, for about 5 minutes.
05 08 51 11	CC	Roger.

05 08 53 29	LMP	Houston, Apollo 8.
05 08 53 30	CC	Apollo 8, Houston. Go.
05 08 53 42	CC	Apollo 8, Houston. Go.
05 08 53 48	LMP	Alright. What do you have in mind here in the way of activating the secondary loop prior to separation? It looks like if we do have a cabin fan problem, we won't be able to do a full-blown coldsoak. Is there anything that we can do that'll do any good?
05 08 54 05	CC	Well, right now, Bill, in the checklist, we're showing this activation at about minus 1 hour. Let me check with EECOM for a minute and see if they got any more words considering the cabin fan situation.
05 08 54 19	LMP	Roger.
05 08 54 59	CC	Apollo 8, Houston. Looks like a good time. One hour before SEP - entry interface would be fine.
05 08 55 10	LMP	Okay. It won't do any good, then, to fool around with these cabin temp valves. ...
05 08 55 21	CC	Bill, stand by. You're - got a lot of background noise.
05 08 55 39	CC	Go ahead now, Bill.
05 08 55 40	LMP	Read me now, Jerry?
05 08 55 41	CC	Loud and clear.
05 08 55 45	LMP	Okay. This coldsoak is built around the premise that you've got a cabin heat exchanger, in my